













Speed humps and tables

Definition

Speed humps and speed tables (also speed bumps, speed cushions, and speed pillows) are vertical-deflection traffic calming devices that extend across a street, perpendicular to the direction of travel. (Humps usually taper near the drain gutter to allow unimpeded bicycle travel.)

Speed humps are typically made of asphalt and are 3-6 inches high at their center and anywhere from 8-14 feet in travel length. The traditional 12-ft hump has a design speed of 15 to 20 mph. Primarily used on lower-volume residential streets.

Speed tables are essentially flat-topped speed humps. They typically have a height of 3 to 6 inches and a travel length of 20 to 25 feet. Typical 22 foot speed tables usually consist of a 10 foot plateau with 6 foot approaches on either side. Typically used on local and collector streets or main roads through small communities.

Objective

To reduce motor vehicle speeds and/or volumes with a goal of increasing safety and reducing crashes.

Advantage

Proven to be effective in reducing travel speeds.

Self-enforcing.

Relatively inexpensive.

May reduce traffic volume by discouraging non-resident traffic.

Speed tables are generally preferred by emergency response departments over 12 to 14-foot speed humps.

Images (clockwise from main image):

Example of a speed hump. Source: Gina Coffman.

Additional example:

Sources: Dan Burden, pedbikeimages.org; Dan Burden; Dan Burden; Dan Burden; Dan Burden; Dan Burden; Mike Cynecki, pedbikeimages.org.

Challenge

May be opposed by emergency response agencies when they believe that the speed humps will delay or damage emergency response vehicles. (Should not be used on critical emergency response routes.)

Increase in costs and complexity of resurfacing and maintenance.

Can increase roadway noise.

Potential drainage issues on some streets.

Must be designed, built, and maintained to prevent motor vehicle passenger and bicyclist discomfort. (May need to specify a construction tolerance.)

Resources

PedSafe—Speed Humps

http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=35.

PedSafe—Speed Tables

http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=36.

ITE Updated Guidelines for the Design and Application of Speed Humps (2007) http://www.ite.org/traffic/documents/AB07H1101.pdf.

ITE Traffic Calming Measures - Speed Hump http://www.ite.org/traffic/hump.asp.

ITE Traffic Calming Measures - Speed Table http://www.ite.org/traffic/table.asp.

Traffic Calming: Speed Humps and Speed Cushions (2011) http://nacto.org/wp-content/uploads/2012/06/Berthod-C.-2011.pdf.

A Matched Case–Control Study Evaluating the Effectiveness of Speed Humps in Reducing Child Pedestrian Injuries http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448312/.

A Study on Speed Humps

http://www.ctre.iastate.edu/Research/roadhump/.

Operational Effectiveness of Speed Humps in Traffic Calming http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.376.1696&rep=rep1&type=pdf.

Towards a North American Geometric Design Standard for Speed Humps http://www.ite.org/traffic/documents/JABooA30.pdf.

Select Treatments | Traffic calming and speed management